Virtualisation and *Software Appliances* as Means for Deployment of *SCADA* in Isolated Systems

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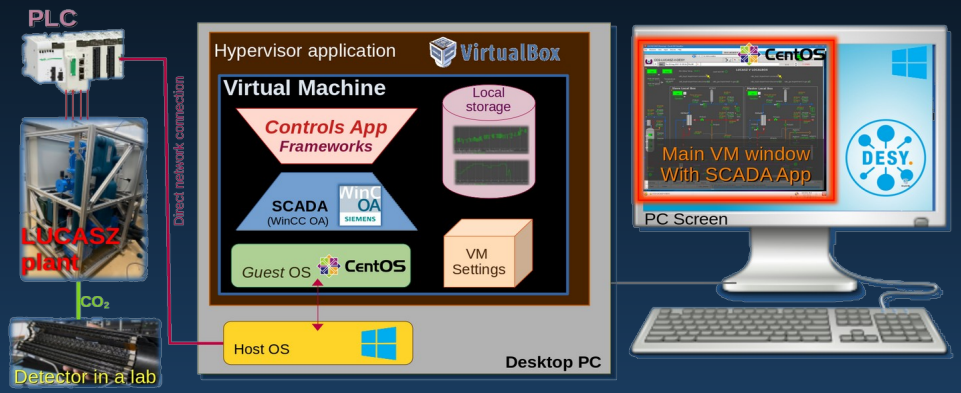
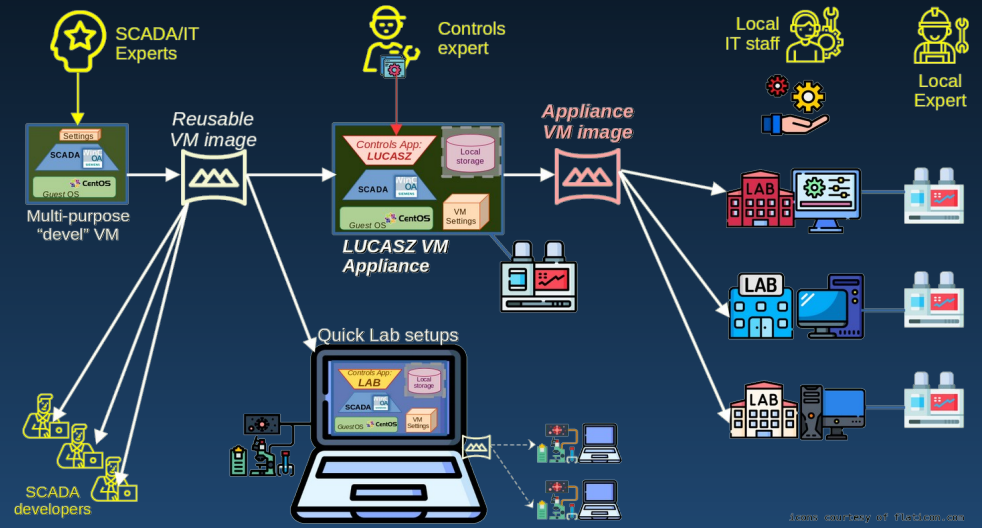
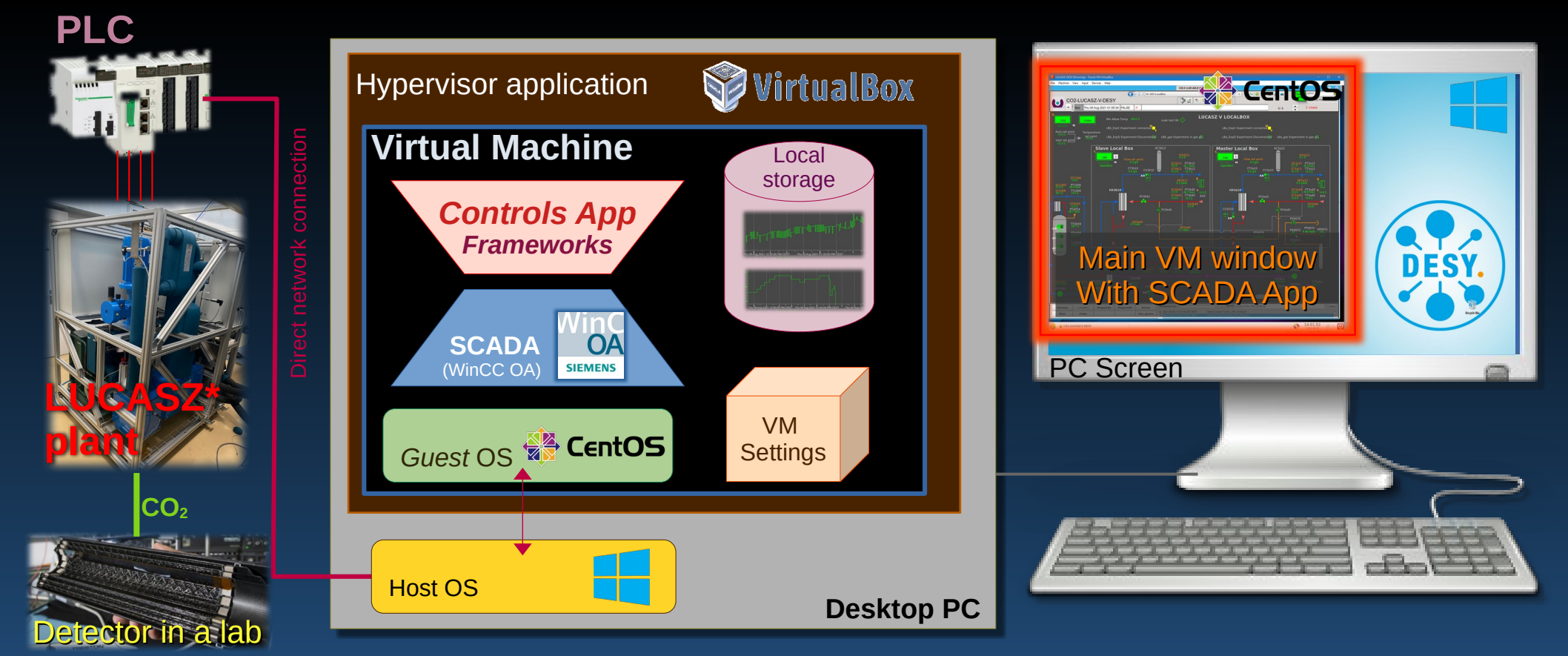


* ***LUCASZ***: Light Use Cooling Appliance for Surface Zones

Blackbox deployment of SCADA for the *LUCASZ** CO_2 detector cooling: appliance based on local desktop virtualisation using *VirtualBox* allows to contain the controls app together with complete environment and dependencies



- Fully functional SCADA for detector cooling operation
- Rapid to deploy and maintain
  - by local IT staff or users with no controls-specific knowledge
  - easy updates, backups, disaster-recovery
- Secure and independent from lab's infrastructure (hardware, operating system, network)
- Reusable self-contained images
- Generally applicable concept



* **LUCASZ**: **L**ight **U**se **C**ooling **A**ppliance for **S**urface **Z**ones

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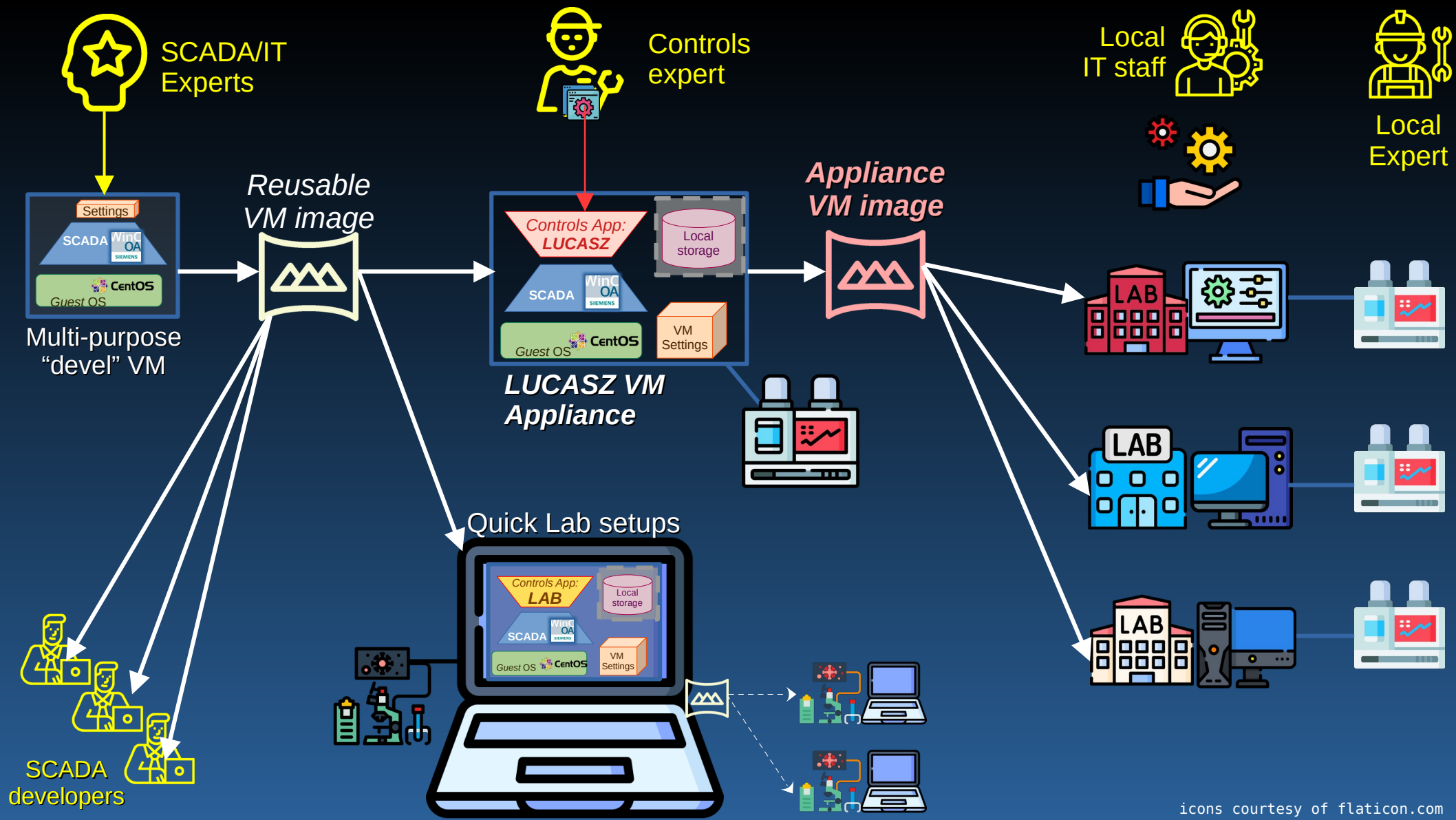
SCADA/IT Experts
Controls expert
Local IT staff
Local Expert
Settings
SCADA
WinCC OA
CentOS
Guest OS
Multi-purpose "devel" VM
Reusable VM image
Controls App: LUCASZ
Local storage
VM Settings
LUCASZ VM Appliance
Appliance VM image
LAB
Quick Lab setups
Controls App: LAB
SCADA developers
icons courtesy of flaticon.com

Advantages:

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  for detector cooling operation
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  infrastructure (h/w, operating system, network)
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- Generally applicable concept